

Marked-up copies of the amended claims are provided in the Appendix to this Response.

- Sub
D,
Bx
1. A movable microstructure comprising:
- a first finger set comprising two or more first fingers extending substantially parallel to a first displacement axis;
 - a second finger set comprising at least one second finger, said at least one second finger extending substantially parallel to said first displacement axis, terminating between said two first fingers, wherein said at least one second finger is substantially closer to one of the two first fingers between which said at least one second finger terminates; and
 - an electrical circuit providing a position-dependent electrostatic force having a magnitude varying in proportion to displacement along said first displacement axis.

- Sub
D,
Bx
4. A movable microstructure comprising:
- a substrate;
 - a proof-mass disposed above said substrate;
 - a first finger set comprising two or more first fingers extending substantially parallel to a first displacement axis from said proof-mass;
 - a second finger set comprising at least one second finger, said at least one second finger is affixed to said substrate and extending substantially parallel to said first displacement axis towards said proof-mass, terminating between said two first fingers, wherein said at least one second finger is closer to one of the two first fingers between which said at least one second finger terminates, thereby forming a capacitor; and
 - an electrical circuit providing a voltage across said capacitor to provide a position-dependent electrostatic force on said proof-mass, said position-dependent force having a component along an axis substantially orthogonal to said first displacement axis, the magnitude of said position-dependent force varying in proportion to displacement along said first displacement axis.

8. The movable microstructure of claim 6 further including:

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a quadrature detection circuit having an output, said quadrature detection circuit synchronized with the output of said oscillation-sustaining feedback loop; and
a feedback connection from the output of said quadrature detection circuit to said first capacitor, said feedback connection providing a voltage across said first capacitor;

wherein said voltage provided by said feedback connection causes the average output of said quadrature detection circuit to converge towards a constant value, thereby causing said mass to vibrate, absent a Coriolis force, more precisely along said first axis.

Sub B4 Cont.
13. A movable microstructure comprising:

a substrate;

a first proof-mass disposed above said substrate;

a second proof-mass disposed above said substrate;

a first finger set comprising two or more first fingers affixed to said substrate and extending substantially parallel to a first displacement axis towards said first proof-mass;

a second finger set comprising at least one second finger, said at least one second finger extending substantially parallel to said first displacement axis from said first proof-mass, terminating between said two first fingers, wherein said at least one second finger is closer to one of the two first fingers between which said at least one second finger terminates, thereby forming a first capacitor;

a third finger set comprising two or more third fingers affixed to said substrate and extending in a direction opposite said first finger set and substantially parallel to said first displacement axis towards said second proof-mass;

a fourth finger set comprising at least one fourth finger, said at least one fourth finger extending substantially parallel to said first displacement axis from said second proof-mass, along a direction opposite said second fingers, terminating between said two third fingers, wherein said at least one fourth finger is closer to one of the two third fingers between which said at least one fourth finger terminates, thereby forming a second capacitor; and